Minutes, 9/08/04 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Report from Bob and Steve
- 2. Report from subproject leaders
- 3. Report from Technical Coordinator -- Jim Steimel
- 4. AOB
- 1. Report from Bob and Steve.
- The go-ahead for production of the 150 Echotek boards was sent to Procurement Friday. Tuesday one more small document was required to give Echotek the information needed to proceed. Delivery schedule is not yet known but all indications are that boards will arrive somewhat earlier than expected.
- Filters are arriving. 27 matched pairs arrived Wednesday, September 8. These will be tested to check the frequency response, impulse response and matching.
- Eric James will talk on Thursday about Echotek boards. (This discussion has since been postponed until next week.)
- The Echotek board (Recycler version) that was sent to Echotek to help debug the transient response issue needs to come back to Fermilab.
- The fourth Tevatron Echotek board will be sent to Echotek for repair after a few further tests to try to understand why and how it is not functioning properly.
- Bob Webber requests one of the three good Tevatron Echotek boards for Duane and Charlie for testing.
- We will track all of the Echotek boards through Prep. Anyone who moves boards from place to place needs to register that information with the Prep counter so that we know where the boards are.
- The two Tevatron Echotek boards (June version) should be returned to Echotek as soon as that makes sense. These will likely only confuse us.

- All pbar ends of the BPMs in the tunnel have been connected to the proper pbar cables.
- 3. Reports from L2 Managers

#### Vince Pavlicek

- The timing card is being discussed. Certain issues that need to be settled before the production of the final cards can begin have been identified. The board should be ready for final production in two weeks.
- We have one timing board prototype finished and in a test crate. A second board is essentially ready. A third and fourth board will be built soon. We will have 38 boards built during the production run. There is a possibility to add more boards for the transfer line BPMs -- Nathan and Bob need to discuss this with Vince and Bill to work out the details.
- The filter board test plan is being finalized. It has been found that the return loss depends on the state of the relays, etc. Getting ready for final production of the boards.
- The two original Dawn crates need to be returned to Dawn. This will be arranged.
  - The cable labels text is almost complete and ready to go.
  - The order for the air dams for the VME crate is out

### Brian Hendricks:

- Luciano has sent the IP address of the Dawn crate for Charlie to use for the crate diagnostics.
- Brian is reading turn by turn data now -- this is the fake data generated by Luciano for this test.
- There was a long discussion about missing turns in the TBT data, how to catch it, whether one uses a counter, some kind of timestamp, whatever. Clearly this is an important issue and will require further discussion.

# Margaret Votava:

- Working on speed issues in the front end software.

- Diagnostics is in place now.

## Tim Kasza:

- F3 and F4 cable extensions have been made and placed. Almost all the areas for the crates are now ready.
- 3. Technical Coordinator -- Jim Steimel
  - The second test stand is coming closer to being finished and ready for use.
- We need to identify and label our space in the service buildings. Others have already seen the open spaces and have tried to use them.
- Jim and Marv Olson have investigated the "0" BPMs. THe F0 BPMs are slightly larger (longer) than the rest. The A0 BPMs they are not sure about yet. B0 and D0 BPMs are half-length near the final focus. In D0 the pbar ends are connected in the tunnel and then terminated upstairs. At B0 the pbar end is shorted. Don't know yet whether we can get at the pbar end of the BPM at the connector in the tunnel. C0 and E0 have normal BPMs.

### 4. AOB.